

FIG. 1

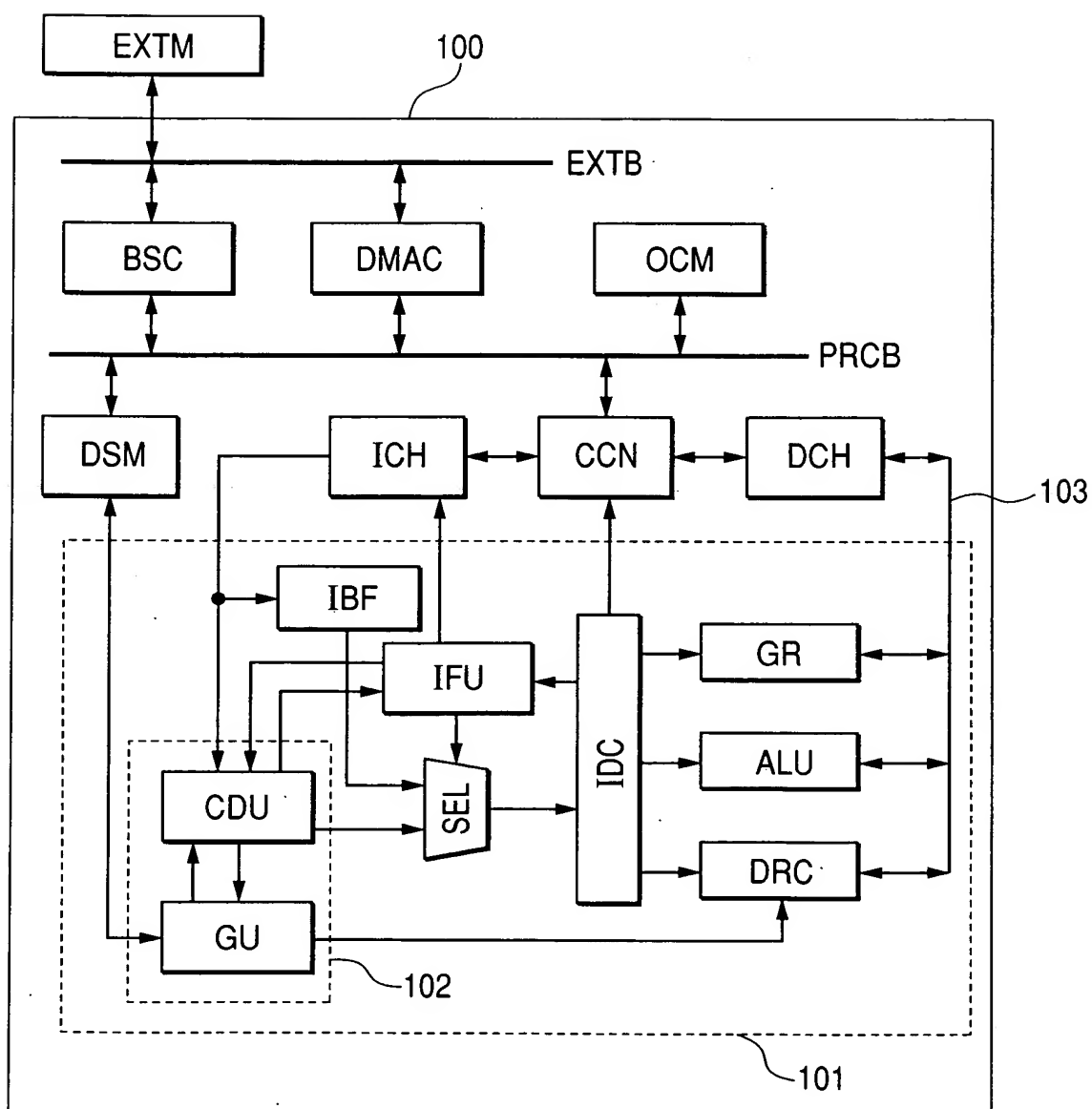


FIG. 2

| LOOP FREQUENCY | OPERATION OF DRC CONTROL UNIT 102 | SOFTWARE TO BE EXECUTED |
|------------------------|--|----------------------------|
| FIRST TIME | TEMPORARY DECISION | NORMAL SW |
| SECOND TIME | NORMAL SW ACQUISITION FINAL DECISION | NORMAL SW |
| THIRD TIME | DRC RECONFIGURATION | NORMAL SW |
| FOURTH TIME | | DRC DRIVER SW |
| FIFTH- n -TH TIME | | DRC DRIVER SW |

FIG. 3

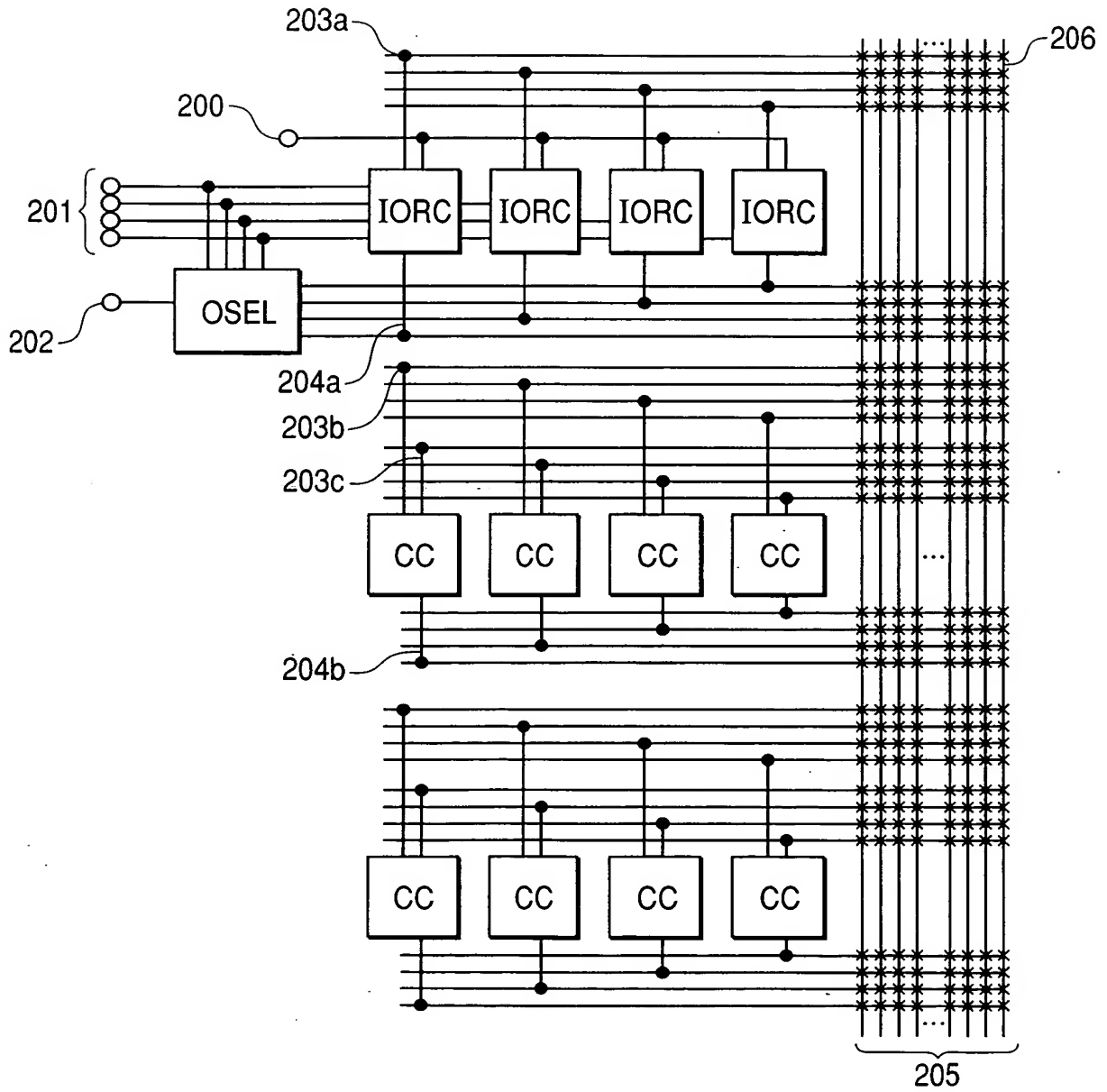


FIG. 4

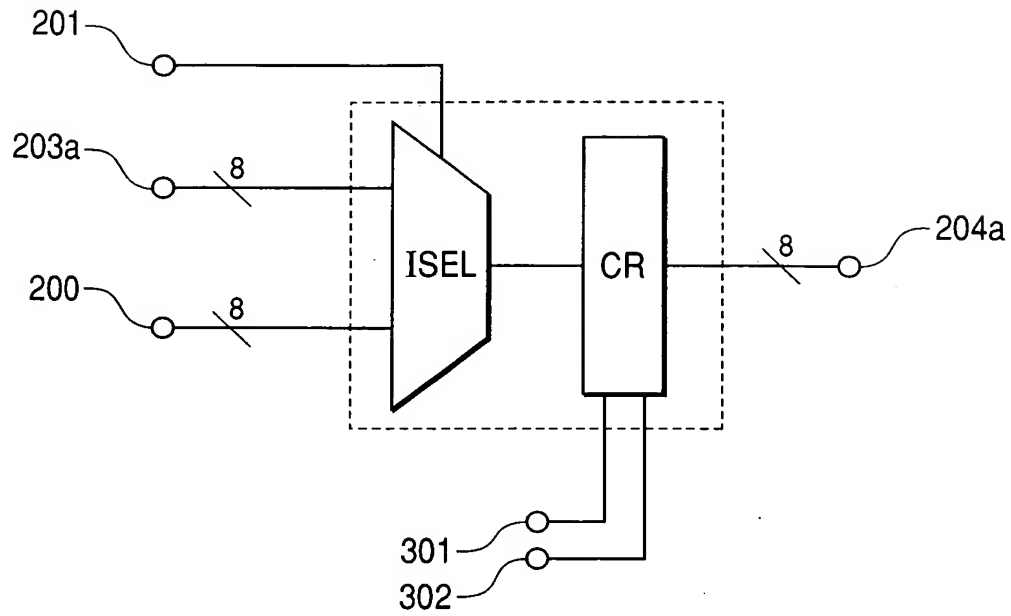


FIG. 5

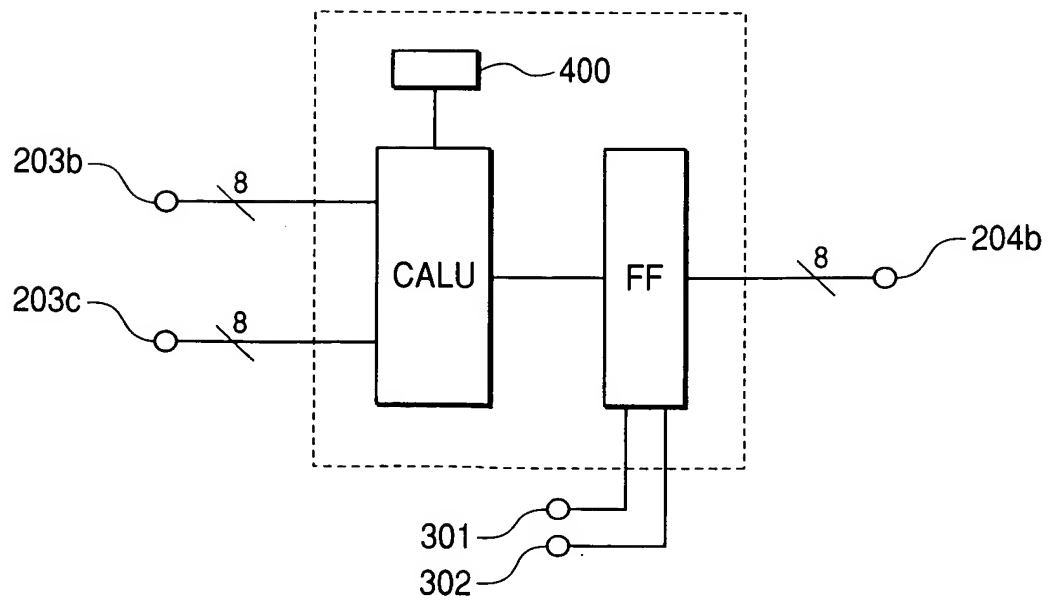
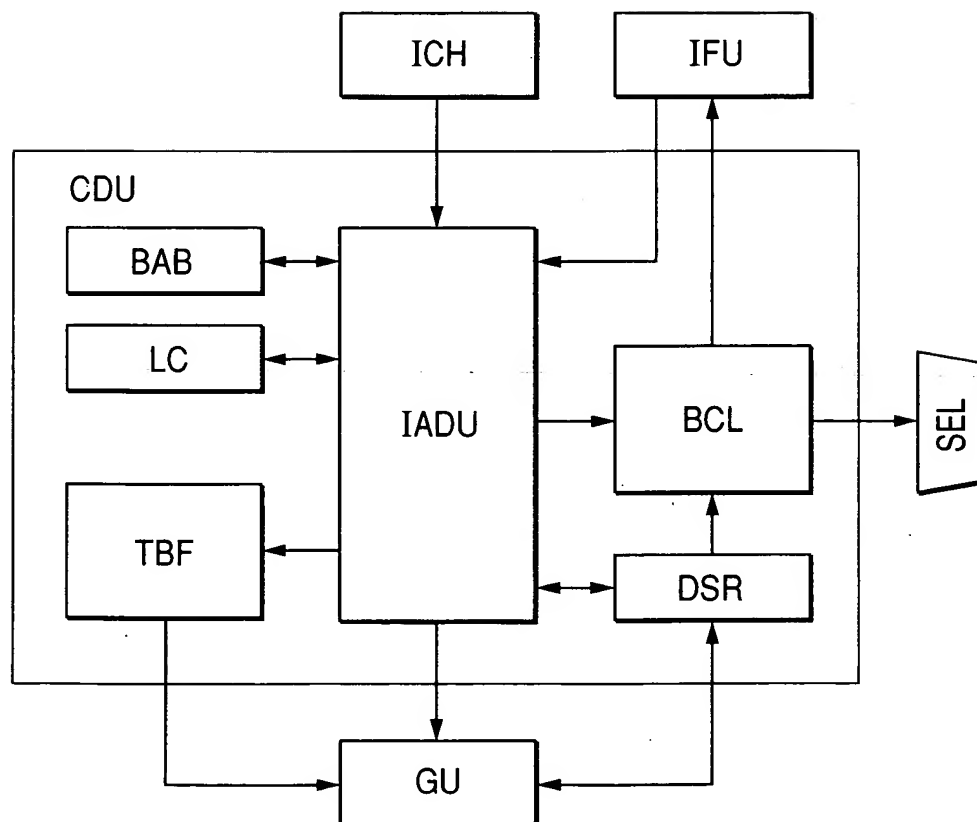


FIG. 6



6 / 12

FIG. 7

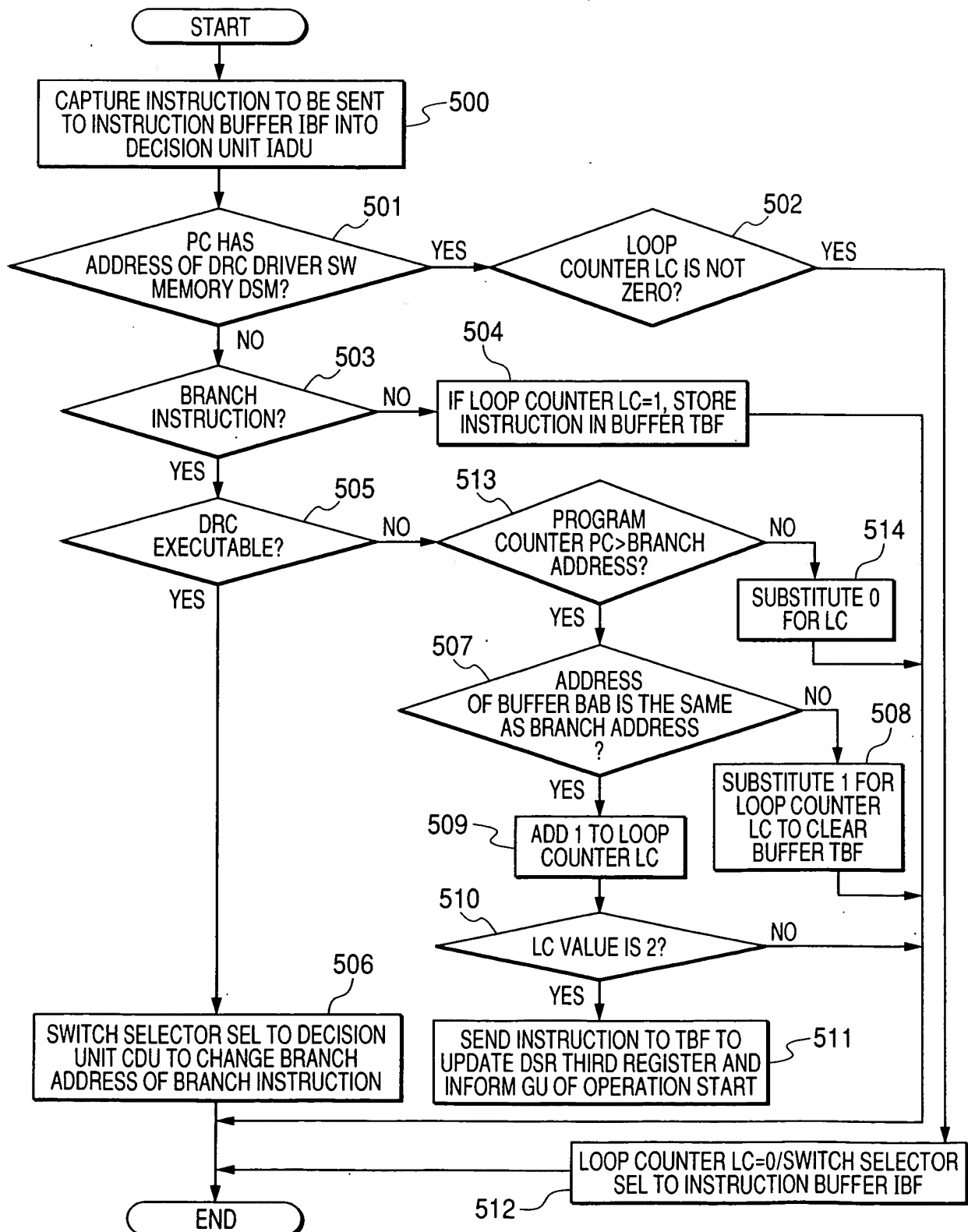


FIG. 8

(A)

| | | |
|----|-------|------------|
| 1 | L001: | |
| 2 | STS | MACL,@-R15 |
| 3 | MOV | #8,R0 |
| 4 | L002: | |
| 5 | DT | R0 |
| 6 | MOV | @R6,R3 |
| 7 | MOV | @R5,R2 |
| 8 | MUL | R3,R2 |
| 9 | MOV | @R4,R1 |
| 10 | STS | MACL,R7 |
| 11 | SUB | R7,R1 |
| 12 | MOV | R1,@R5 |
| 13 | MOV | @R4,R3 |
| 14 | ADD | R3,R7 |
| 15 | MOV | R7,@R4 |
| 16 | ADD | #4,R4 |
| 17 | ADD | #4,R5 |
| 18 | BF | L002 |
| 19 | L003: | |
| 20 | NOP | |
| 21 | LDS | @R15+,MACL |
| 22 | RTS | |
| 23 | NOP | |

(B)

| | | |
|----|-------|---------|
| 1 | L002: | |
| 2 | DT | R0 |
| 3 | MOV | @R6,R3 |
| 4 | MOV | @R5,R2 |
| 5 | MUL | R3,R2 |
| 6 | MOV | @R4,R1 |
| 7 | STS | MACL,R7 |
| 8 | SUB | R7,R1 |
| 9 | MOV | R1,@R5 |
| 10 | MOV | @R4,R3 |
| 11 | ADD | R3,R7 |
| 12 | MOV | R7,@R4 |
| 13 | ADD | #4,R4 |
| 14 | ADD | #4,R5 |
| 15 | BF | L002 |

(C)

| | | |
|----|--------|----------|
| 1 | MOV | R6,dR6 |
| 2 | MOV | R5,dR5 |
| 3 | MOV | R4,dR4 |
| 4 | L002a: | |
| 5 | MOV | @dR6,dR3 |
| 6 | MOV | @dR5,dR2 |
| 7 | MOV | @dR4,dR1 |
| 8 | DT | R0 |
| 9 | MOV | dR1,@dR5 |
| 10 | MOV | dR7,@dR4 |
| 11 | NOP | |
| 12 | BF | L002a |
| 13 | MOV | dR5,R5 |
| 14 | MOV | dR4,R4 |
| 15 | JMP | L003 |

(D)

| | |
|-----|----------------------------------|
| MOV | DATA TRANSFER INSTRUCTION |
| ADD | ADDITION INSTRUCTION |
| SUB | SUBTRACTION INSTRUCTION |
| MUL | MULTIPLICATION INSTRUCTION |
| DT | DECREMENT+BRANCH SET INSTRUCTION |
| BF | BRANCH INSTRUCTION |
| JMP | NONBRANCH INSTRUCTION |
| NOP | NO OPERATION |
| LDS | SYSTEM REGISTER LOAD |
| STS | SYSTEM REGISTER STORE |
| RTS | RETURN INSTRUCTION |
| R* | GENERAL REGISTER* |
| dR* | IORC* |

8 / 12

FIG. 9

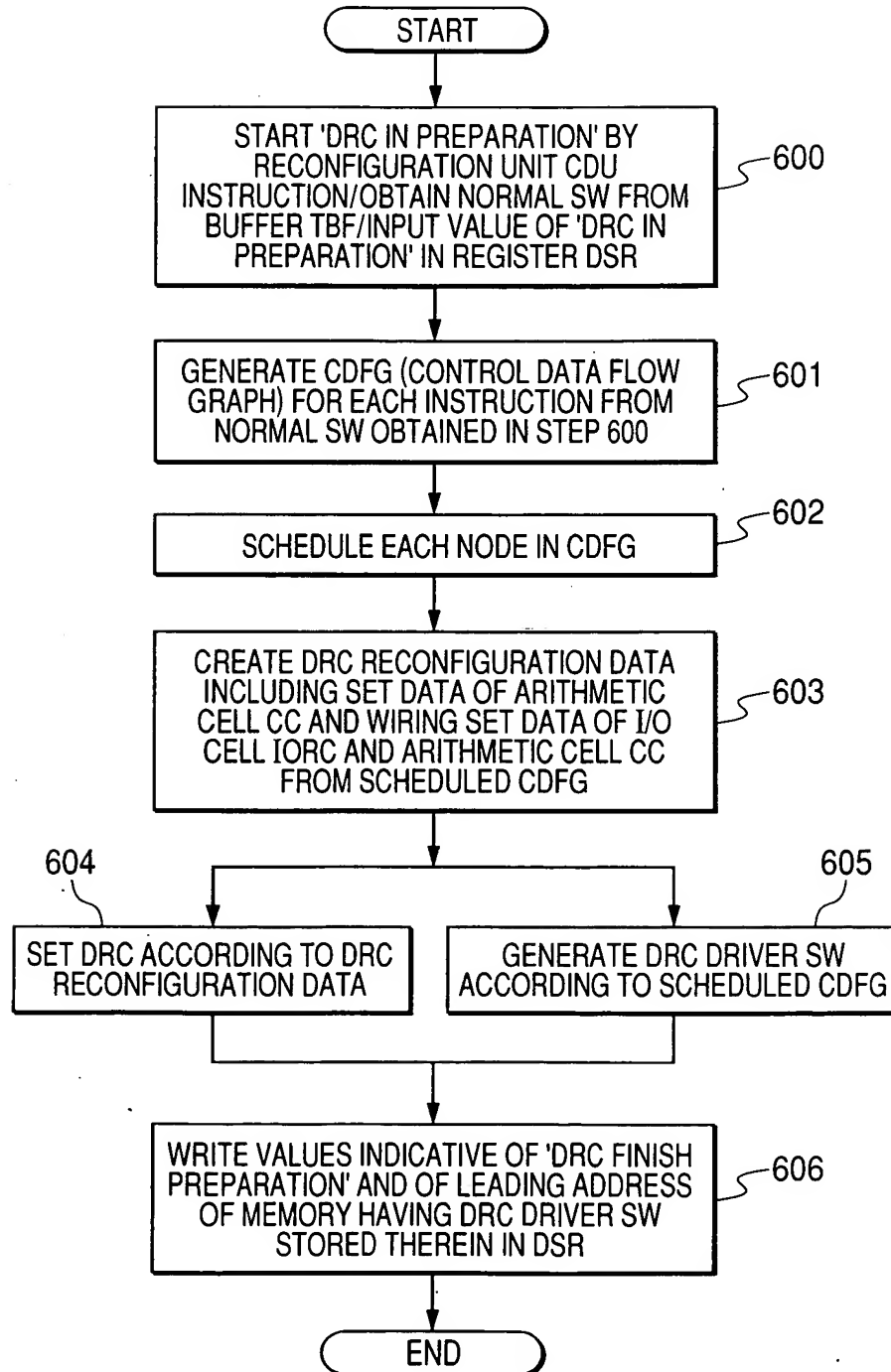


FIG. 10

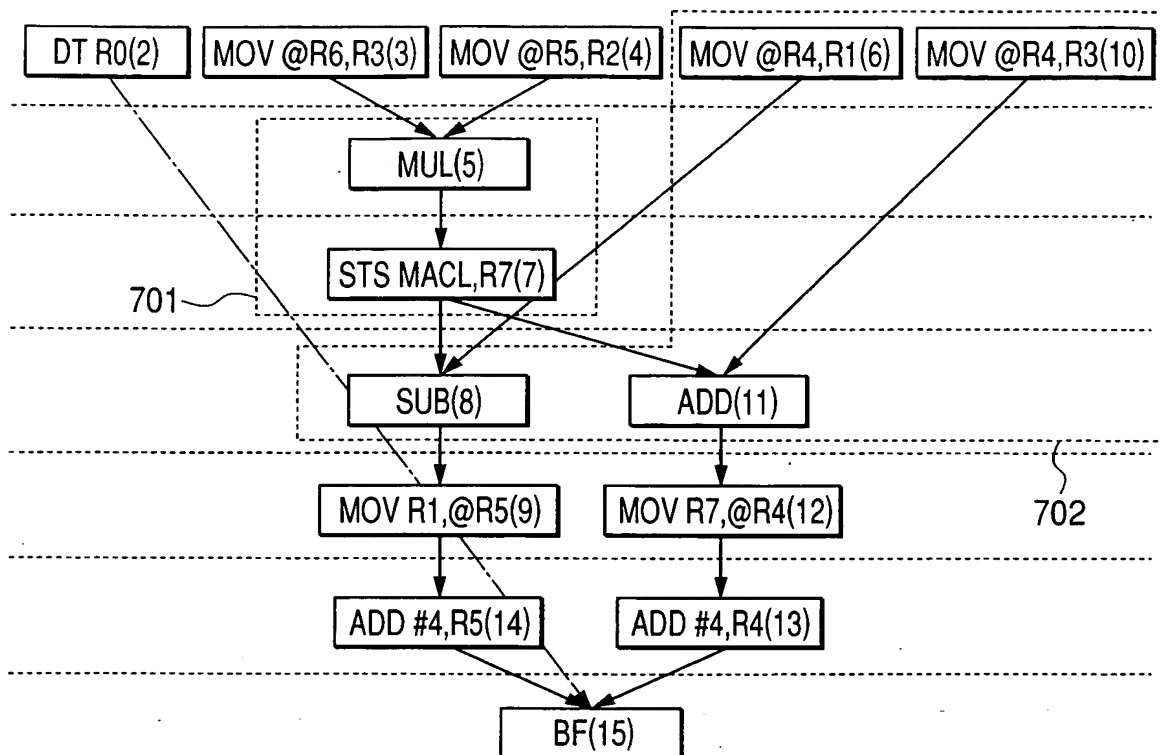


FIG. 11

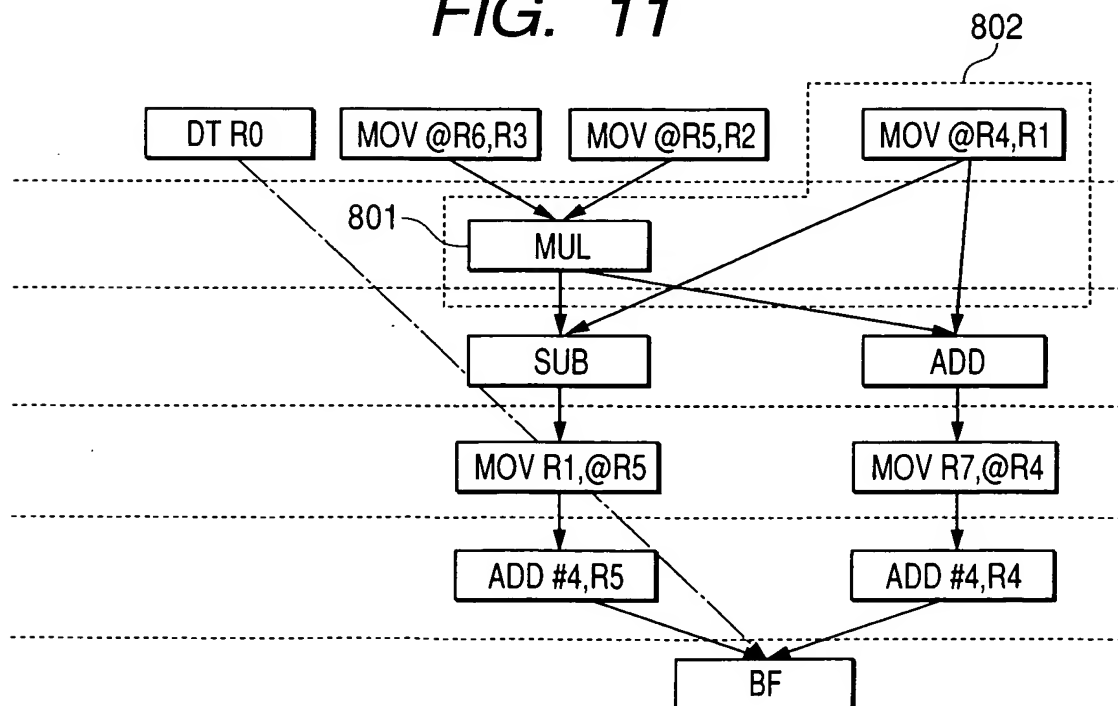


FIG. 12

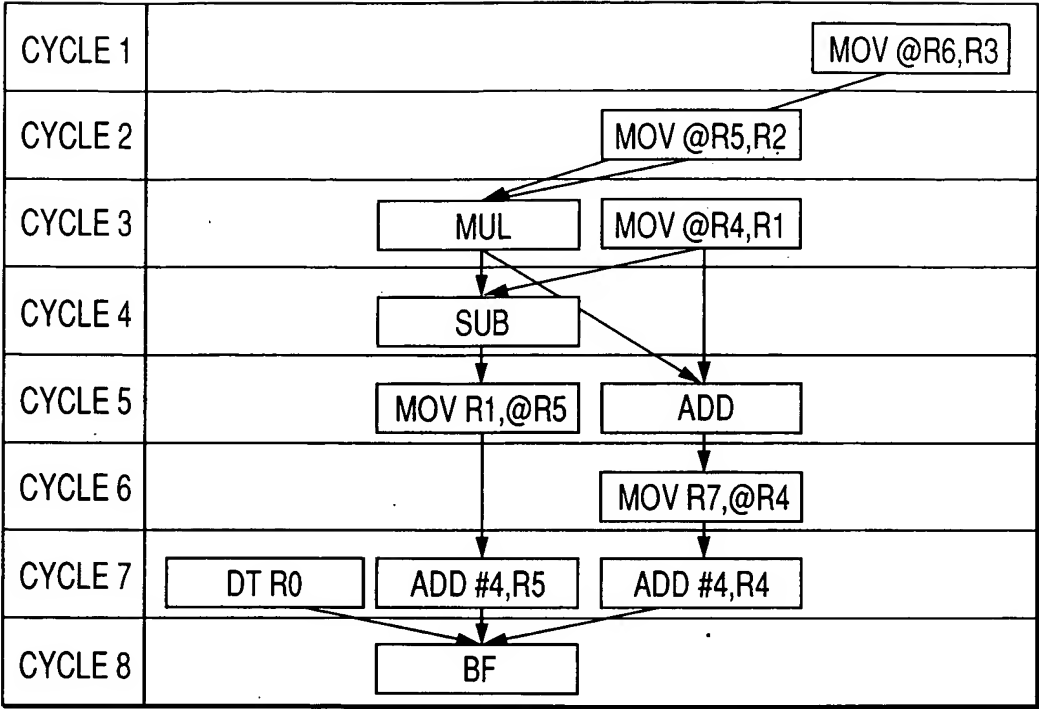


FIG. 13

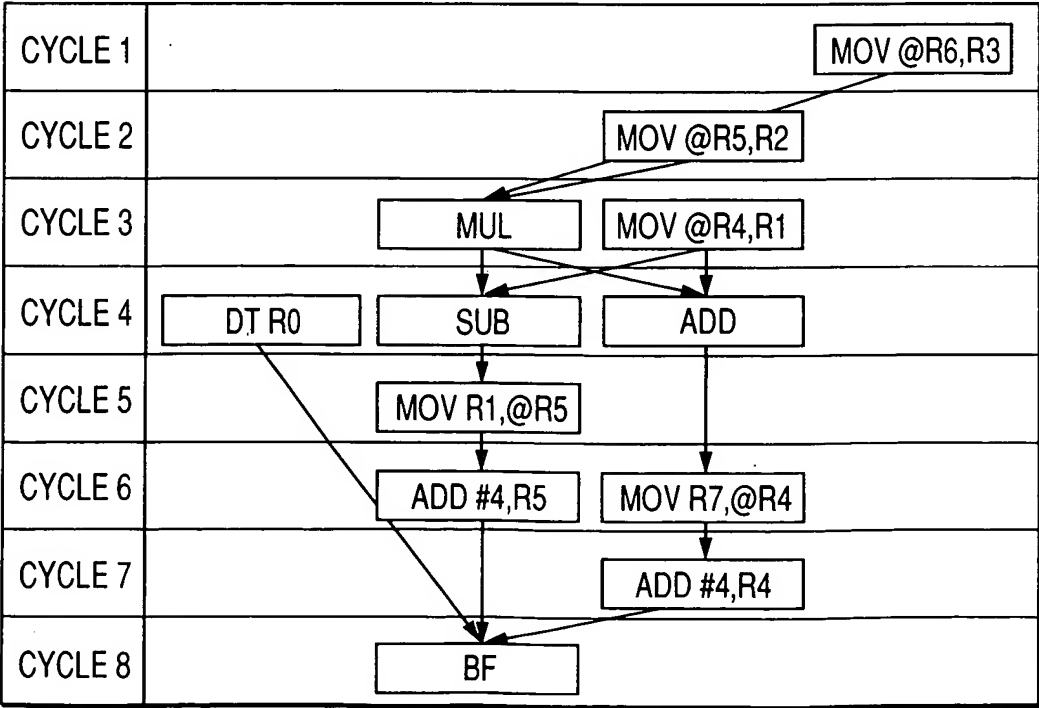


FIG. 14

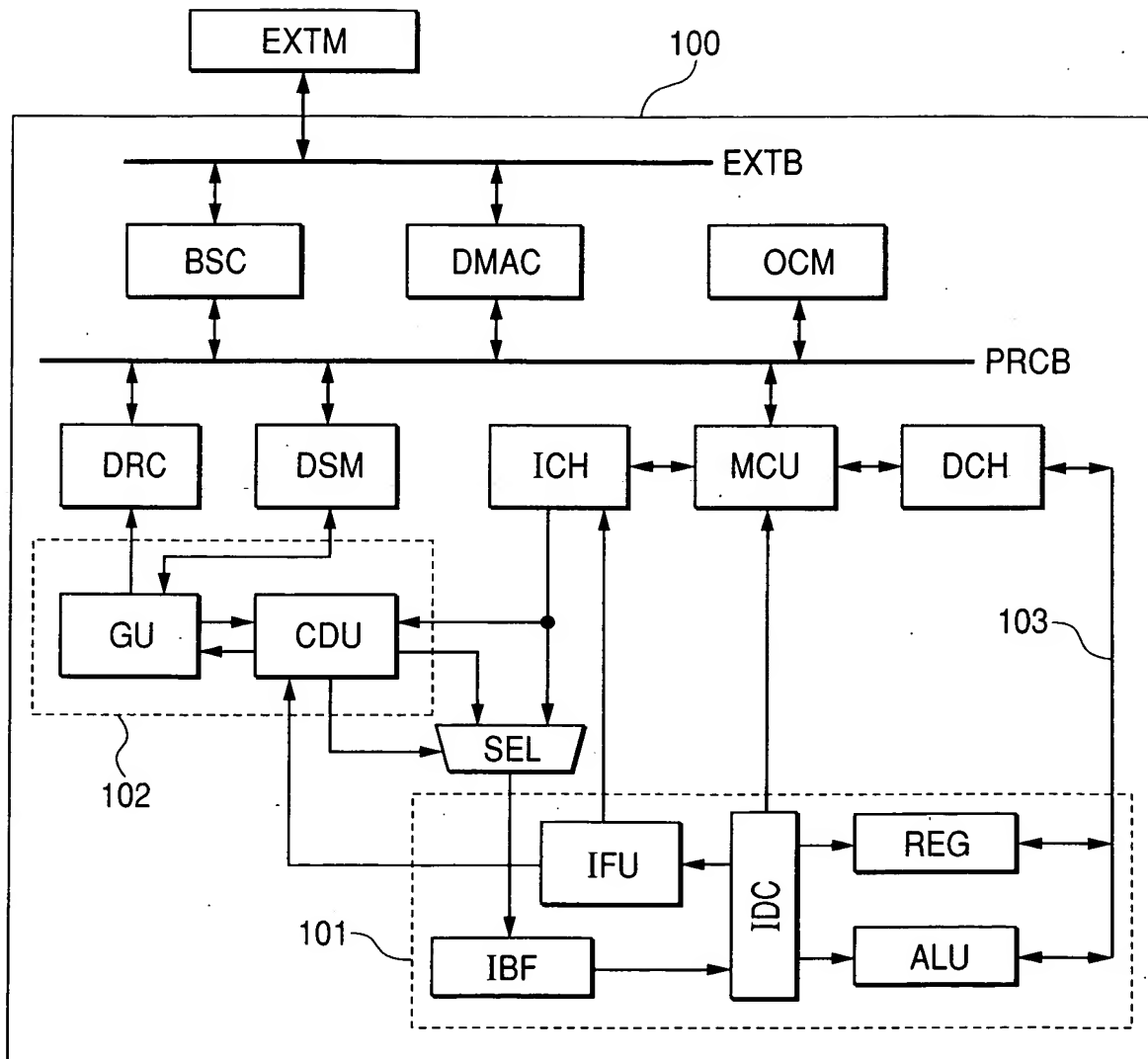


FIG. 15

